AMENDMENTS TO THE DRAWINGS:

The attached replacement sheets include changes to Figures 2 and 5. In Figure 2, an arrow between Object Type 22 and Object Description has been added and Load 21 has been added. In Figure 5 previously omitted element 48 has been added and Load 45 has also been added.

Attachment: 3 Replacement Sheets

REMARKS

Claims 1-9 are pending in this application. The drawings were objected to for failing to include various reference signs. Corrected replacement drawings are enclosed with this Amendment. The specification has been amended to correct the reference on page 19, line 14 from "output user interface 35" to --output user interface 36--. The specification has also been amended to provide a more descriptive title, correct the typographical error on page 16 and correct the abstract.

Claims 1 and 9 have been amended. New Claim 10 has been added.

Claims 1-7 and 9 were rejected under 35 USC §103 as being unpatentable over Smith et al. (U.S. Patent No. 5,704,021), Parkhurst et al. (U.S. Patent No. 5,642,474) and Parkhurst et al. (Hewlett-Packard Journal, February 1994). Claim 8 was rejected under 35 USC §103 as being unpatentable over Smith et al. (U.S. Patent No. 5,704,021), Parkhurst et al. (Y5,642,474) and Parkhurst et al. (Hewlett-Packard Journal, February 1994), and further in view of Palmer (U.S. Patent No. 6,078,403).

Claim 1, as amended, claims a method of creating a page description language description of an electronic document; comprising: providing an electronic document, wherein the electronic document includes at least one image object; converting the electronic document into print data and rendering data in accordance with a page description language to generate a PDL file; associating at least one printer-independent print-quality characteristic with the at least one image object; wherein a printer-independent print-quality characteristic comprises instructions for indicating a feature of an image element that is to be preserved during rendering without specifying any printer-specific imaging actions needed to achieve the feature, such that when printer-dependent imaging actions are associated with the printer-independent print-quality characteristic, the printer-dependent imaging actions taken by the printer achieve the feature of the image element to be preserved during rendering; and inserting the association information in the PDL file.

New Claim 10 depends from Claim 1 and includes the limitation wherein the printer-

independent print-quality characteristics comprise at least one of "make sharp edges", "reduce mottle", "distinguish neighboring colors", "reduce moiré", "distinguish tone and edges", "maximum tone depth", "perceptual colors", "contour", "no abutting corners", "increase moiré", "uniform gloss", "distinctness" and "compress without loss of detail".

Smith was cited for associating at least one printer-independent print-quality characteristic with at least one image object. Applicant respectfully disagrees. Smith describes a system which enables a user to identify color objects within a document and to select preferred rendering options for those color objects by object types. Smith associates printer-dependent imaging actions, such as print color control, halftoning and lightness. Print color control, halftoning and lightness are imaging or rendering actions that depend on the particular printer; they are not printer-independent print-quality characteristics.

Nothing in Smith teaches or suggests associating at least <u>one printer-independent print-quality characteristic</u> with the at least one image object; wherein a printer-independent print-quality characteristic comprises instructions for indicating a feature of an image element that is to be preserved during rendering without specifying any printer-specific imaging actions needed to achieve the feature, such that when printer-dependent imaging actions are associated with the printer-independent print-quality characteristic, the printer-dependent imaging actions taken by the printer achieve the feature of the image element to be preserved during rendering. Claim 10 describes some exemplary printer-independent print-quality characteristics.

Printer-independent print-quality characteristics guide the imaging compromises made by a printer without specifying exact imaging choices such as the use of a particular halftone, color-matching table, black ink treatment, compression, etc. Thus a printer-independent print-quality characteristic expresses a goal ("sharp edges") for an image element which stays the same from printer to printer, but the specific imaging actions taken to achieve the goal may vary from printer to printer and from media to media depending on the printer/media characteristics.

Parkhurst was cited for teaching inserting association information in the PDL file. Parkhurst describes a method of modifying the conventional three step ROP (raster operation)

process to require less computation and memory. The conventional three step ROP process is a software process which fills in arbitrarily shaped objects with a solid fill or patterned fill (col. 2, lines 20-23). The modified process requires that the fill pattern be transmitted only once for all shaped objects having the same fill pattern. Associating arbitrarily shaped objects and their fill patterns in the PDL file is not the same as associating printer-independent print characteristics (a printer-independent print-quality characteristic comprises instructions for indicating a feature of an image element that is to be preserved during rendering without specifying any printer-specific imaging actions needed to achieve the feature) with objects in the PDL file. The ROP process, whether modified or unmodified, describes the object to be rendered (what - e.g., the location of an edge on an object), not its printer-independent print-quality characteristics (how the edge of the object is to be rendered).

The Parkhurst journal was cited for teaching that the PCL specifies print attributes in a device independent fashion (citing page 87, paragraph 1 under Raster Operations). The Parkhurst journal is similar to Parkhurst, described above, in that it refers to ROP. The Parkhust journal states in part, "This provides a level of abstraction way from hardware, allowing the applications to specify attributes and lay down geometrical shapes in a device independent fashion." It is believed that by specifying attributes, Parkhurst journal is referring to what is to be drawn by the printer (e.g., radius of a circle and fill pattern), but that it does not teach or suggest specifying printer-independent print-quality characteristics (how the edge of the circle or the fill pattern is to be rendered; what features are to be preserved).

Palmer was cited for teaching adding PDL comments for each object descriptor, citing col. 4, lines 52-56. "As will be appreciated by those skilled in the art, following the creation of base document 44, the user can add selected presentation text or other objects to base document 44 utilizing the facilities provided by user application 40." "Adding selected presentation text or other objects" is not the same as specifying printer-independent print-quality characteristics.
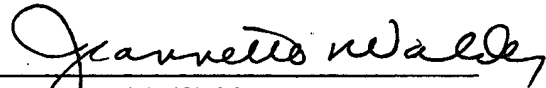
No additional fee is believed to be required for this amendment; however, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees,

other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025.

Claims 1-10 are believed to be in condition for allowance. Reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is requested to call the undersigned Attorney for Applicant, Jeannette Walder.

Respectfully submitted,

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Telephone No. 714 565-1700

Xerox Corporation
Santa Ana, California
Date: September 21, 2005